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## 11

IMPROVING PUBLIC - VALUE CAPTURING  
IN URBAN DEVELOPMENT**Demetrio Muñoz Gielen**

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[demetrio@urbsadvies.nl](mailto:demetrio@urbsadvies.nl) (\*)**Abstract**

*This chapter focuses on the innovative public practices of capturing land value in urban development (i.e. public-value capturing). There are significant differences between England, Spain (region of Valencia) and the Netherlands. The English and especially the Spanish/Valencian public bodies manage to transfer the bill for paying and/or providing public infrastructure to property developers. Public infrastructure refers to: public roads and space, sewerage, public facilities and buildings, affordable and social housing, etc. In addition, the English and Spanish/Valencian public bodies manage to capture part of the value increase that accrues from re-zoning land. This contributes to the public budget and helps to improve the quality and quantity of public infrastructure. These differences among the countries are mainly the result of differences in their planning system: first the level of certainty about future development possibilities before negotiations between developers and local planning bodies take place; and second whether public bodies dispose of a land readjustment regulation to avoid dependence on private parties to provide the infrastructure.*

**Keywords:** *Public-value capturing, urban development, public infrastructure, landownership, public-private, urban planning, Social and affordable housing, land speculation, land readjustment.*

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## 11.1 INTRODUCTION

Public-value capturing may be considered one of the most important driving forces of public planning, as public bodies hope to at least recover the costs of public infrastructure through the increase in land value. In urban development practice, public-value capturing usually takes place in the context of an agreement between public bodies (municipalities, public planning bodies, public development agencies, etc.), property developers and landowners. Under the notion of ‘public-value capturing’ there are various concepts, such as: ‘cost recovery’, ‘value capturing’ and ‘capturing betterment’. Cost recovery refers to the recovery of costs related to the construction of public infrastructure through contributions from private developers. They may contribute either by building this infrastructure directly or by paying the public bodies to do so. Value capturing is when public bodies that have invested in infrastructure capture the increased land and property values which result from that investment. Capturing betterment refers to a public body capturing the increased value that results from modifying the zoning plans and is irrespective of any incurred costs (Krabben & Needham, 2008: 4; Needham, 2007: 175-178).

There is much discussion about which of these forms of public-value capturing is legitimate, and there are relevant differences in the legal limits to public-value capturing between England, Spain and the Netherlands. England, due to the nationalisation of development rights introduced in 1947 and Spain since the Constitution of 1978, differ radically from the Netherlands regarding the right to the increase in value that accrues from re-zoning the land. In England, public bodies can tax the increased value, but nowadays this does not happen. Instead, what works in practice is a system of planning agreements that allows public bodies to charge property developers a (broad and increasingly previously defined)

set of contributions, including contributions in money for infrastructure situated off-site (outside the development site).

In Spain public bodies have the right to a share in the increased value, which has translated into a right to a percentage of the serviced building plots, which landowners have to deliver for free. Contribution to the realisation and payment of the public infrastructure takes place within a strict predefined set of obligatory contributions and a land readjustment regulation that rules the distribution of the charges among the landowners and the developers. Contributions cover most of the costs of on-site public infrastructure (situated within the development site), and most of the land needed for off-site infrastructure. Additionally, there are also possibilities to agree to more contributions through negotiations.

In 2008 the Netherlands confirmed the previous doctrine that the increased value belongs to the landowner solely. Dutch public bodies are authorised to charge less costs than the English and the Spanish (Muñoz, 2008).

This chapter aims to provide empirical evidence on innovative practices of public-value capturing by first doing exploratory research in several Western European countries, and second by studying cases of urban regeneration on privately owned land in England, the Netherlands and the Spanish region of Valencia. Public bodies in England and especially in Valencia have managed: 1) to make developers provide the public infrastructure, either by paying for it or constructing it; and also 2) to capture part of the increased value. I will focus on two independent variables that are responsible for the majority of these differences. The first independent variable is flexibility in planning, i.e. the level of certainty about future development possibilities before negotiations between developers and local planning bodies take place. Since the 1980s in Spain and since

the 1990s in England, public bodies have been working towards increasing beforehand the certainty about the contributions that developers will have to provide, in kind (e.g. providing the infrastructure, building social housing) or in monetary funds (e.g. paying the municipality). This certainty stimulated the internalisation of these contributions in land prices and land development costs and resulted in an improvement of public-value capturing (Muñoz & Tassan-Kok, 2010).

The second independent variable deals with an important aspect of property rights in land, which is: are public bodies dependent on private parties when acquiring land, gathering financial means and providing the public infrastructure? There is debate in Spain and the Netherlands about the scope of the landowner's rights and the availability of public law instruments to intervene. In the Spanish region of Valencia the debate led to the introduction in 1994 of a new type of land readjustment regulation that has had large positive effects on public-value capturing. Section 2 'Method and data' will summarise the methodology used for data gathering and analysis. Section 3 'International differences in public-value capturing' will provide an analysis of the degree of public-value capturing in each country. Sections 4 'Flexibility in planning' and 5 'Property rights on land' will provide an analysis of the two variables that seem to explain international differences. Finally, Section 6 will draw conclusions on the possible implications of the findings.

## 11.2 METHOD AND DATA

A fundamental question in case-based research is whether the findings are valid. Central here are the concepts of 'internal validity' (i.e. can the findings explain the studied cases?) and 'external validity' (i.e. can the findings be generalised to other cases?).

This chapter mainly bases its conclusions on data from an explorative research in nine European Union countries and on several cases of urban regeneration in three of them: four cases in Spain (Valencia), three in England and four in the Netherlands.<sup>1</sup> Internal validity was confirmed by a combination of five strategies:

1) Maintaining the context as constant as possible to reduce the risk of spurious third variables:

- We studied countries with somewhat similar political, economic and social contexts to the Dutch context, all of them EU members: the UK, Spain, Germany, France, Italy, Flanders (Belgium), Denmark and Sweden.
- The cases show similarities in terms of landownership situation (privately owned land), the need for significant public infrastructure, and an important value increase of the land due to re-zoning.

2) Maximising the variance in the independent variable, i.e. electing those countries and cases that show the broadest variance in the independent variables 'Flexibility' and 'Property rights', and seeing what happens in the dependent variable 'public-value capturing' (Polit e.a., 2001: 188-192; Swanborn, 1996: 62-64):

- Of the nine countries, Spain and the UK were selected for in-depth research because they showed the widest variation in the level of flexibility and in the definition of property rights

<sup>1</sup> Of the four Valencian urban regeneration projects, three are located in the city of Valencia ('Guillem de Anglesola', 1.2 ha; 'Periodista Gil Sumbiela', 0.6 ha; 'Camino Hondo del Grao', 5.7 ha) and one in the city of Alicante ('Benalúa Sur', 8 ha). The three English projects are located in the city of Bristol: 'Harbourside/Canon's Marsh' (7.8 ha), 'Temple Quay' (7.4 ha) and 'Megabowl' (1.3 ha). The four Dutch cases are located in the cities of Amsterdam ('De Funen', 8 ha), Eindhoven ('Kruidenbuurt Noord', 17 ha), Groningen ('Kop van Oost', 5 ha) and Breda ('Stationskwartier', 16 ha).

in land. Thanks to this variance, the likelihood increases that a possible causal relationship with the public-value capturing variable becomes visible. We focused on England (and not on the UK) and the region of Valencia (and not Spain) because of differences in planning law among the different British constituent countries respectively as among the different Spanish regions;

- In the selected three countries we chose cases that showed innovative features in the independent variables.

3) Repeated measurement: It was possible to apply this strategy for the data gathering in Valencia: here a new planning law in 1994 introduced important changes in independent variable property rights (see section 5), while the context (i.e. the potential third spurious variables like culture, public policies, financial situation of the municipalities, developments in the real estate markets) remained the same. Because of the lack of available dossiers of suitable cases in the period before 1995, this research had to limit the data gathering for that period to literature and interviews. For the period after 1995, besides literature and interviews, this research included research on four cases.

4) Checking for other variables: We systematically checked a list of possible third spurious variables: personal circumstances of those involved, political circumstances and market price of real estate.

5) The external validity (generalisability of the research findings to other cases) was also the goal of diverse strategies. Without a reasonable degree of external validity, the findings in this chapter would run the risk of being supported by overly specific cases.

Several strategies have been taken in order to be able to claim that what happens in the studied cases is not an exception and somehow stands for other urban regeneration cases in the three countries studied and other European countries:

First we selected cases that in some way stand for the main sorts of urban regeneration projects (see Table 11.1).

To further increase the external validity of the findings, other sources of more or less general knowledge have been analyzed:

- Data has been sought about other cases. Sometimes there was quite generalisable data available, especially in Valencia and England;
- Interviews with experts, who gave information about other cases they know.

The case-based findings have systematically been positioned within this more general knowledge. This has allowed assessing their degree of external validity.

England and the Spanish region of Valencia were selected because they show clear exceptional features in the independent variables. Together with the Netherlands, these three countries offer a wide variance. This makes the studied countries more representative as examples of the different values that the independent variables can assume. Many countries show characteristics situated in between this variance.

TABLE 11.1 SELECTED URBAN REGENERATION CASES IN ENGLAND, SPAIN AND THE NETHERLANDS

|                                  | VALENCIA  | ENGLAND                  | THE NETHERLANDS           |
|----------------------------------|---|--------------------------|---------------------------|
| Multifunctional central areas    | Guillem de Anglesola and Periodista Gil Sumbiela              | Temple Quay              | Stationskwartier          |
| Monofunctional residential areas | Guillem de Anglesola and part of Benalúa Sur                  | (*)                      | Kruidenbuurt              |
| Old brown-field sites            | Periodista Gil Sumbiela, Camino Hondo and part of Benalúa Sur | Megabowl and Harbourside | De Funen and Kop van Oost |

*Multifunctional central areas consist of city/town central areas and sites around railway stations*

*Monofunctional residential areas consist of districts with a predominant residential use.*

*Old brownfield sites are derelict sites: business and other sorts of economic-industrial activities; gas and electricity factories; harbour areas; railway infrastructure; and hospitals, government buildings and military sites.*

*(\*) It was not possible to find a case in England that would fit within this category.*

#### BOX 11.1 OVERVIEW OF SOME OF THE CASE STUDIES

**Regeneration of Harbourside Canon's Marsh, Bristol, England.** This site comprises 7.8ha of land forming the last and largest part of the regeneration of a former dockland. Planning permission became definitive in 2003 with the sealing of a Development Agreement. Initially 60% of the land was privately owned, the rest was owned by the City Council of Bristol. Work on infrastructure provision commenced in 2004. By June 2007 more than half of the development had been delivered or was under construction, and the first buildings were already occupied and in use.

**Regeneration of Kop van Oost, Groningen, Netherlands.** This site comprises 5ha of vacant land with 60% owned by the former user, a wood-processing company. After negotiations with the municipality, the land has been re-sold twice to commercial developers. Negotiations with the final developer crystallised in 2005 in a Development Agreement. The plan was definitively approved in 2006, including 430 dwellings, most of them apartments, and about 4,000 m<sup>2</sup> commercial space. In October 2007 infrastructure provision was ongoing.

**Regeneration of Benalúa Sur, Alicante, Spain.** In 1998 the owners of 60% of the land, led by a small consultancy group that owned 15% of the land, submitted a proposal to rezone the site (8ha, empty plots, some decrepit housing and several industries) into residential and some commercial space. In 2004, the Development Agreement was signed and the detailed land-use plan became definitive. It included about 600 apartments plus some offices and retail space. By 2007 a commercial developer had bought an important share of the land and work had begun on the provision of infrastructure.

**Regeneration of Guillem de Anglesola, Valencia, Spain** This project comprised 1.2ha of land and included the demolition of old and decrepit housing and the construction of a main road flanked by about 125 new apartments. A commercial developer submitted a proposal in 1999 and becoming the urbanising agent in 2005 after public tender, negotiations and the signing of a Development Agreement. The developer had bought almost all of the land by the end of the land readjustment procedure in 2008, at which time infrastructure provision had not yet begun.



### 11.3 INTERNATIONAL DIFFERENCES IN PUBLIC-VALUE CAPTURING

When comparing the three countries, there seem to be clear differences in public-value capturing. The differences mainly involve (Muñoz, 2008; see Table 11.2):

- **On-site infrastructure provision costs:** in England and Valencia these are mostly or fully paid by the developers, while the Netherlands has large public subsidies;
- **Land for on-site public infrastructure:** in Valencia this is provided for free by the landowners, while England and the Netherlands used to have a much larger public contribution for providing this land;
- **Social housing:** in England and Valencia they are paid to a large extent or almost fully by the developers, while in the Netherlands this is covered primarily by municipalities and housing associations;
- **Public infrastructure located off-site or on-site but servicing a much larger area:** in England and Valencia developers contribute significantly (in England primarily with financial means while in Valencia primarily with land). In the Netherlands these contributions are very rare;
- **Capturing increased value:** local public bodies in Valencia capture a significant share, even if they own no land. In England public bodies do not profit officially but because of the broad definition of developers' contributions one might conclude the contrary. In the Netherlands public bodies capture increased value only in case they own the land and/or invest and share the risks.

The next sections analyse possible explanations for these large differences. Why is public-value capturing the highest in Valencia, lower but also high in England, and relatively- speaking very low in the Netherlands?

### 11.4 FLEXIBILITY IN PLANNING

In this chapter we define flexibility as the room for change and alteration in zoning prescriptions during the planning process. This chapter focuses on one specific aspect: the level of certainty about the future development possibilities, related to the period in which public bodies and developers negotiate the terms within which development of the site may take place.

Certainty depends on whether legally binding zoning plans (e.g. land-use plans, planning permission) and indicative zoning plans (e.g. development plans) come into force before or after the negotiations, and on the contents of these documents.

This chapter makes a distinction between two sub-variables (types of certainty): certainty about building possibilities (what, where and how the landowner will be allowed to build), and certainty about future contributions (how much the landowner will have to contribute, in kind or in money).

#### Negative effect of certainty about building possibilities

In England, Spain and the Netherlands, local public bodies usually create certainty in the early stages, to different degrees, about future building possibilities. In Spain the certainty is the highest, and this happens through the approval of General Land-use Plans, obligatory documents for each Municipality that must cover the whole municipal territory and include detailed prescriptions (see Figures 11.1 and 11.4). This document is legally binding, which means that it provides legal rights to citizens and landowners. For example,

TABLE 11.2 COMPARISON OF RESULTS OF PUBLIC-VALUE CAPTURING: WHO PAYS WHAT IN ENGLAND, VALENCIA AND THE NETHERLANDS?

|  |               | ENGLAND  | NETHERLANDS   | VALENCIA   |
|--|---------------|--|---|--|
| On-site infrastructure provision costs                       | Developer     | Almost all the costs   | Part of the costs   | All or almost all these costs  |
|  | Public bodies | Indirect through providing cheap land or cheap financing.            | Heavy subsidies   | No   |
| Land needed for on-site public infrastructure                | Developer     | Most of the land   | Important part of the land  | Almost all the land  |
|  | Public bodies | Part of the land   | Important part of the land  | Not much land, only that land that was already public infrastructure   |
| Land needed for on-site public buildings                     | Developer     | Part of the land   | Commercial developer none; housing association eventually   | Almost all the land  |
|  | Public bodies | Part of the land   | Most of the land  | Not much land, only that land that was already public infrastructure   |
| On-site public buildings                                     | Developer     | Not often  | Commercial developer none; housing association eventually   | Sometimes  |
|  | Public bodies | Almost always  | Almost always   | Almost always  |
| Affordable housing   | Developer     | Increasing amount of affordable and social housing                   | Only housing corporations contribute, Commercial developers don't   | Almost all   |
|  | Public bodies | Partly   | Sometimes   | Some minor object subsidies  |
| Contributions to off-site public infrastructure & facilities |               | Developers contribute significantly, increasingly in the last years. | Developers almost do not contribute at all to public infrastructure/ facilities outside plan area, and modestly to infra/facilities situated within but serving wider area. | Landowners cede significant quantities of land, and sometimes pay the construction of these infrastructure and facilities. |
| Capturing betterment   |               | In principle, no   | None  | Landowners transfer for free 10% of the building volume in green-field sites, and often pay money                          |

*Grey: Country in which the developer/landowner contributes the most of the three countries.*

*Brown: Country in which the developer/landowner contributes the second most of the three.*

*Light brown: Country in which the developer/landowner contributes the least.*



if this document foresees a building on plot X, but afterwards the Municipality decides to change the plan to diminish or eliminate the building, the landowner has right to full compensation for the value of the building as prescribed in the first plan, even if he had not yet constructed it.

In England and the Netherlands, local public bodies usually approve indicative,

not legally binding plans, which create some certainty. Examples of these documents in the Netherlands include Nota van Uitgangspunten, Stedenbouwkundig Plan/Visie; and in England, Local Plans, Development Plans. These documents are not legally binding, meaning that the final plan can easily diverge from them. In addition, these documents used to be very vague and general in their determinations (see Figures 11.2 and 11.3).

FIGURE 11.1 GENERAL LAND-USE PLAN OF THE CITY OF VALENCIA - 1988



#### BOX 11.2 GENERAL LAND-USE PLANS AND THE CASE OF VALENCIA

In the region of Valencia, as in the rest of Spain, municipalities are obliged by law to approve a legally binding General Land-use Plan. Early in the development process this General Plan prescribes future development possibilities, both in green-field and urban regeneration sites. Figure 1 shows two maps belonging to the 1988 General Land-use Plan of the city of Valencia. The left map zones those sites to be developed in the near future, the right map those to be developed in the longer term. Nowadays the prescriptions of this document are almost all implemented, and the Municipality is working towards a new General Plan. This General Plan prescribes the following:

- It zones land into: (i) existing urban land; (ii) Land to be developed or redeveloped in the future, soon or in the longer term; and (iii) Non-developable land or rural area;
- Prescribes possible building typologies, maximum number of dwellings and sometimes a maximum floor space index (how many m<sup>2</sup> floor space can be build per m<sup>2</sup> land);
- Logical phasing of development;
- Main public infrastructure as main roads and parks, new university, etc;
- Land-use determinations for non-developable land;
- Zones land into building regulation zones (e.g. historic city, urban extension, etc).

In green-field sites to be developed in the near future, and in urban regeneration sites, General Plans also prescribe detailed regulations, as height and delimitation of buildings, draft of public infrastructure, etc. In the four cases, the General Plan did indeed prescribe detailed regulations, including the alignment and height of the buildings and a maximum number of m<sup>2</sup> floor space. Usually, these prescriptions remain unchanged and become effectively implemented, or with minor modifications. However, this is not always the case. There is the possibility of modifying structural elements, after an extensive public procedure, which happened in two of the four studied cases.

FIGURE 11.2 REGENERATION OF HARBOURSIDE/CANON'S MARSH, BRISTOL, ENGLAND



Sources: Maps live; Report from the Head of Bristol Planning Services to Bristol Local Council Committee, 2001.

### BOX 11.3 REGENERATION OF HARBOURSIDE/CANON'S MARSH - CASE STUDY VARIABLES

#### ***First variable: flexibility in planning***

The 1997 Bristol Local Plan zoned the entire site as a 'Major regeneration area', with offices, leisure/tourist activities, and housing (about 200 dwellings). In 1998 the Council approved a Planning Brief that augmented the number of dwellings to 400. However, these documents are of indicative character, which means that they can be changed without extensive procedure, and also that they do not create any right for the landowners. The Council could in theory decide to diminish the building possibilities without this giving to the landowner the right to compensation for the lost virtual building possibilities. After negotiations, the 2003 Planning Permission augmented the total number of dwellings from 400 to 700. The 1998 Planning Brief prescribed also the obligations likely to be paid, including a cross-subsidy for the essential infrastructure and the council's leisure objectives. Although this document did not prescribe any specific amount, it seems that it created enough clarity for the developer to assess, within a margin, the financial feasibility of the scheme. Nevertheless, this degree of certainty was relative. The Council could deviate from the document: for example, during the negotiations, the Council first added the requirement of 30% of affordable housing, to lower the percentage afterwards.

#### ***Second variable: Property rights***

The developer was not willing to comply with some requirements of the Council, contending that they threatened the financial feasibility of the operation. For example, the developer was against the requirement of constructing 30% social/affordable housing, finally accepting a 9% requirement.

#### ***Realised public-value capturing***

The developer pays most of the on-site public infrastructure, including roads, public space and expensive soil decontamination. The Council pays a minor part and the public programme English Partnership issues a cheap loan to the developer. In total 50% of the land will be used for any kind of public infrastructure, of which 3/5 are provided by the developer and 2/5 by the Council. The developer will build 9% social housing; of which half are rented units and half are affordable units to sell. In this he will bear a deficit. The developer pays €30.5 million to the Council for major leisure facilities in the neighbourhood and will also provide works to adjacent highways costing between €2 and €7 million.

FIGURE 11.3 REGENERATION OF KOP VAN OOST, CITY OF GRONINGEN, NETHERLANDS



Sources: Google Earth; 2006 Land-use Plan

#### BOX 11.4 REGENERATION OF KOP VAN OOST, CITY OF GRONINGEN, NETHERLANDS - CASE STUDY VARIABLES

##### ***First variable: flexibility in planning***

Here several indicative plans preceded the signing of the Development Agreement in 2005, foreseeing 'house and business' in the site (p. 64) without specifying it very much further. In 2004 an indicative plan detailed the outline zoning by specifying a number of around 400 units (p. 40). However, these documents are of indicative character, which means that the Municipality of Groningen could in theory decide to diminish the building possibilities without this giving to the landowner the right to compensation for their virtual loss. Finally the 2006 Land-use Plan allowed about 430 dwellings. Regarding the future contributions, there was no certainty at all, as the documents mentioned above failed to define either specific unprofitable elements or any cost allocation principle.

##### ***Second variable: Property rights***

Property developer Mr. Hollestelle, bought the land and initiated negotiations with the municipality in 2000. Hollestelle re-sold the land to commercial developer IBC in 2001, and commercial developer Heijmans bought IBC (including the land) in 2002. In 2001 and 2002 the national average prices of new dwellings increased above inflation at about 6% per year. Prices of apartments in the region of Groningen also increased above inflation during 2003 (4.5%), 2004 (7%) and 2005 (9.5%). It is reasonable to conclude that waiting was economically an interesting option. After Heijmans bought IBC in 2002 they decided to wait to 'redefine' the plan. As a result the plans were re-drafted, which led to considerable delay (Buitelaar et al., 2008: 58; Segeren, interview in 2008). The option to wait not only delayed regeneration but also lowered public-value capturing. From the beginning of negotiations, the developer argued that there was little financial leeway in the project, i.e. making it clear to the municipality that there were not many value-capturing possibilities. The municipality, which did not have access to the financial calculations of the developer, already in the early stages seems to have accepted that it could not ask for large contributions. Also, the municipality accepted several cost saving changes in the quality of the public space constructed by the developer (Buitelaar et al., 2008: 113-114).

##### ***Realised public-value capturing***

The developer pays part of on-site public infrastructure. The Municipality of Groningen pays the renovation of the roads circumscribing the new buildings. In total, about 50% of the site will be used for any sort of public infrastructure. The developer provided for free 2/5 of this land, the Municipality 3/5 (most of it was already public space). Further, the developer makes no other contribution.

The findings in all three countries suggest that more certainty beforehand may result in less public-value capturing. It seems that when municipalities prescribe development possibilities early in the development process, this might stimulate land price increases and might also lead to the loss of a valuable negotiation tool. Municipalities might be giving away their 'treasure': that of being the only institution entitled to decide, with certain discretionary powers, if, when and what is allowed to be built. High land prices affect public-value capturing negatively because they jeopardise the financial leeway to finance public infrastructure. However, it was not always possible to measure the actual effect of this sub-variable (certainty about future building possibilities) in this study, mainly because this certainty was similar in almost all cases and there were few examples to the contrary. The conclusions are thus mainly based on reasoning. In addition, this sub-variable seems not always to be the only determinant as a second sub-variable (certainty about future contributions, see below) may play a more relevant role. In other words, certainty about building possibilities, if accompanied by certainty about future contributions, does not necessarily influence public-value capturing negatively.

### **Positive effect of certainty about contributions**

The differences among the countries are larger when we look at the second sub-variable, certainty about what the landowner will have to contribute to public infrastructure.

In Valencia, in the early stages there is much certainty about future contributions. This certainty seems to have improved public-value capturing (see Figure 11.4). The following documents create this certainty:

1. Legally minimum standards, approved for each Spanish region (see Box 11.5 for the standards in the region of Valencia);
2. Local policy, approved by the municipalities (see Box 11.7 for example in the Municipality of Valencia);
3. The above-mentioned legally binding general land-use plans include location and dimensions of main public infrastructure (see Figures 11.1 and 11.4).

In recent years, English municipalities are increasingly creating some certainty through the approval of formal policy on planning obligations.

Nowadays, a majority of local authorities has enacted such policy (Campbell e.a., 2000: 760, 763-764; Department for Communities and Local Government, 2006: 19-20). This policy is mainly of two sorts:

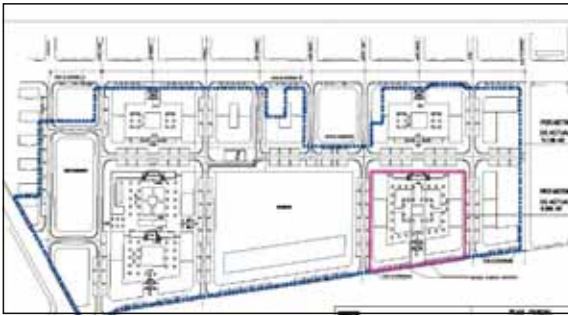
1. Site-specific indicative plans that establish the contributions for the development in question, i.e. Bristol's 1998 Planning Brief (Box 11.3 );

#### **BOX 11.5 EXAMPLES OF LEGAL MINIMUM STANDARDS FOR RESIDENTIAL SCHEMES IN THE 1998 REGULATION, REGION OF VALENCIA**

- Minimum public space: with a floor space index of one m<sup>2</sup> floor space per m<sup>2</sup> land, a minimum of 63% of the plan area must be used for public space: 15% for green areas, 20% for public facilities and 28% for roads;
- Minimum number of plots for public facilities: schemes with more than 8,000 m<sup>2</sup> floor space must provide at least one plot for public facilities.



FIGURE 11.4 REGENERATION OF BENALÚA SUR, ALICANTE, SPAIN



Sources: Maps Live; 2003 Detailed Land-use Plan.

#### BOX 11.6 REGENERATION OF BENALÚA SUR, ALICANTE, SPAIN - CASE VARIABLES

##### ***First variable: flexibility in planning***

The 1987 General Plan of the city of Alicante, and its subsequent modification in 1997, prescribed detailed regulations for the Benalúa site, for instance the detailed alignment of public infrastructure and apartment buildings, and a maximum building volume of 103.670 m<sup>2</sup> floor space for a maximum of 742 dwellings. The 2004 Detailed Land-use Plan fulfilled all these prescriptions, without modifying them. Thanks to the 1987 and 1997 documents, and thanks to the 1998 Regulation, the obligatory contributions were clear beforehand.

##### ***Second variable: Property rights***

The 1994 Act might have been relevant here. The owners of about sixty percent of the land did join together and undertook initiative submitting the first regeneration plan to the Municipality. Even though another three parties submitted alternative plans, the municipality ultimately selected the owners' proposal. Thus, the old voluntary land readjustment regulation (previous to the 1994 legal modification, in which compulsory land readjustment was only possible when the owners of more than sixty percent of the land supported the plan) would have been sufficient. However, a small consultancy company, owner of only about 15% of the land, was the first to take the initiative. The fact that it could do so without having the support of the other owners may have stimulated them to join the initiative posted by this small consultancy company, as they were aware that the municipality could 'by-pass' them and appoint this small company as the urbanising agent.

##### ***Realised public-value capturing***

The developer pays the entire on-site public infrastructure, including the roads, park, public space, and a plot for a new school. The school itself will be constructed and paid by the respective public body. In total, almost 80% of the land will be used for any kind of public infrastructure, and the landowners must provide all this land for free. They will also deliver for free a plot of 5.4 ha situated off-site, on which the Municipality intends to construct a new highway. There is no direct link between Benalúa and this new highway. The developer will in addition construct some pipelines that serve not only the new buildings, but also other areas in the City. Finally, the landowners will give for free to the Municipality about 10% of the serviced building plots. The Municipality will sell these plots for a low price to developers, who must build social housing on them.

**BOX 11.7 CRITERIA FOR THE RE-ZONING OF THE 1988 GENERAL PLAN OF THE CITY OF VALENCIA, APPROVED IN 2000, MODIFIED IN 2004**

- The re-zoning must improve the urban quality: reducing the total building volume, or introducing any other objective improvement.
- Of the total building volume, 20% must be commercial/recreational or affordable housing.
- Compensation: for each new m<sup>2</sup> floor space, one m<sup>2</sup> land must be reserved for public facilities (additional to the minimum obligations established by the legal standards and in the General Plan), or 0.5 if the developer uses at least 20% of the building volume for affordable housing. These m<sup>2</sup> of land may also be ceded off-site, or paid in money.
- If the new dwellings add more than 1,000 inhabitants to the area, landowners have to cede at least 5,000 m<sup>2</sup> land for a park (additional to the legal minimum cessions).

**BOX 11.8 EXAMPLE OF STANDARD CONTRIBUTIONS PRESCRIBED IN BRISTOL'S 2005 SPD4 DOCUMENT**

- Affordable housing: in residential developments of 25 or more dwellings or one hectare or more in size, a percentage of the total number of units according to local affordable housing policy (30% in 2007, red.);
- Educational facilities: in residential developments of 40 or more dwellings £9,136 per additional pupil numbers in excess of the capacity of local nursery and primary schools, £14,346 per additional pupil of local secondary schools; the developer is usually required to pay a sum for the provision of off-site facilities, or in exceptional cases to provide these facilities on-site.

2. Non site-specific, generic policy documents that establish standard and similar contributions for the whole municipality. The approval of these generic documents has been stimulated in recent years by the central government in London. An example of this document is Bristol's Supplementary Planning Document Number 4, SPD4, adopted in 2005 (see Box 11.8).

In general for England, there is evidence that local authorities that dispose of standard, already known charges, are able to gain more obligations, in number and in terms of their economic value (Department..., 2006: 19, 22, 27-28, 54). This strengthens the conclusion, based on the studied cases, that certainty about

contributions has a positive effect on public-value capturing. It is expected that in the next years the planning obligations mechanisms will play an important role in capturing some of the development profit for re-investment back into essential infrastructure (Gallent & Tewdwr-Jones, 2007: 211-213, 257).

In the Netherlands there is little certainty ever, created either through legally binding or indicative documents. And if there is some, it is to a limited extent. Only in exceptional circumstances is the amount of future contributions clear before negotiations take place or before the price of land is established. This uncertainty seems to have a negative influence on public-value capturing (see Box 11.4).



There are several explanations for the positive effect of certainty about contributions. First, certainty may have a deflating impact on the price of land, as developers do indeed take account of future contributions when calculating the price to be paid to the landowner, and lower land prices augment the financial leeway for public-value capturing. This explanation fits in with the economic explanations of land price mechanisms (White, 1986: 104-107; Rowan-Robinson & Lloyd, 1988: 128-130; Campbell et.al., 2000: 769-771). Second, certainty influences the negotiations because the obligatory contributions serve as starting point, and because public officers have a strong policy base to require contributions. Tables 11.3 and 11.4 summarise the findings.

### 11.5 PROPERTY RIGHTS IN LAND

There is a debate in the Netherlands and Spain about property rights in land that has inspired the definition of the second variable. The debates focus on whether the landowner should

have the exclusive right to develop his land, and whether he/she should be able to exclude others from exercising this development right. Also, it focuses on the extent that the law should be allowed to regulate this right. The British nationalisation of development rights in 1947 is an important point of reference in both countries (CPB, 1999; Priemus & Louw, 2000, 2003; Korthals Altes and Groetelaers, 2000; Parejo, 1991; García-Bellido, 1993, 1994; Roca, 2007). The similarities between the debate in the Netherlands and Spain are obvious, e.g. in both countries proposals have been made to separate development rights from the property rights of the landowner. In 1994 concrete steps were taken in Spain; the region of Valencia adopted new legislation that in practice separated infrastructure provision from property rights. Today, this innovation has been introduced in almost all of the remaining 17 Spanish regions. Inspired from this legislation, this chapter explores the effect of one aspect of property rights (i.e. the degree to which public bodies depend on landowners to provide the infrastructure) on public-value capturing.

TABLE 11.3 SUMMARY OF DEGREE OF CERTAINTY IN SPAIN (VALENCIA), ENGLAND AND THE NETHERLANDS

|                  | CERTAINTY BEFOREHAND ABOUT BUILDING POSSIBILITIES | CERTAINTY BEFOREHAND ABOUT CONTRIBUTIONS |
|------------------|---|--|
| SPAIN (VALENCIA) | Always, much certainty                            | Always, much certainty                   |
| ENGLAND          | Sometimes, some certainty                         | Sometimes, some certainty                |
| THE NETHERLANDS  | Always, some certainty                            | Almost never, and limited certainty      |

TABLE 11.4 SUMMARY OF THE EFFECT OF CERTAINTY ON PUBLIC-VALUE CAPTURING

|   | CERTAINTY BEFOREHAND ABOUT CONTRIBUTIONS | NO CERTAINTY ABOUT FUTURE CONTRIBUTIONS |
|---|--|---|
| Certainty beforehand about building possibilities | ++ more capturing value increase         | - less capturing value increase         |
| No certainty about future building possibilities  | ++ more capturing value increase         | + some capturing value increase         |

### Differences in dependence between public and private actors

None of the nine Western European countries studied has a full and clear separation of the right to develop from property rights in land. In all of them, development rights belong to the landowner, i.e. the landowner is always the only one entitled to build on the land (in accordance to the zoning regulations and upon obtaining the necessary permits). However, in Spain, Germany, France and Sweden planning law explicitly refers to providing infrastructure as a 'responsibility' or 'task' of the public bodies, but not of the landowner or the developer.

Having answered the question 'who owns the right to develop' (the landowners in principle, even though in Spain, Germany, France and Sweden, law defines infrastructure provision as a public task and something differentiated from the rest of development rights) was however not specific enough for gathering the empirical data. Therefore, this chapter focused on the power/dependency relationships between the involved actors (municipality, developer, landowners) in each transaction in development processes. Urban development is possible only with the following successful transactions (Alexander, 2001):

1. Land purchase and assembling (obtaining the necessary land);
2. Financing;
3. Land preparation and development (infrastructure provision, which results in serviced building plots);
4. Land disposition (of serviced building plots, ready for construction);
5. Building.

Each step implies transactions (of land, of money). Infrastructure provision can only happen after completing at least the first three transactions. It was possible to distinguish between England and the Netherlands on the one hand and the Spanish region of Valencia on the other hand. In England and the Netherlands the transactions needed for providing infrastructure are very dependent on reaching agreements with the landowners. This is because none of the actors controls all of the necessary resources, i.e. municipalities have a monopoly on regulatory powers (zoning plans and building permits), but the landowners/developers control the land and have the investment capacity. This mutual dependence is very strong; to avoid it, municipalities must get heavily and directly involved, in financial and organizational terms (by expropriating land and constructing infrastructure for example).

On the other hand, in Valencia the 1994 planning law introduced a fundamental change. Before 1994 there was a similar strong mutual dependence, but this dependence disappeared soon after the introduction of the law; municipalities are not dependent anymore on reaching agreements with the landowners.

Besides pre-emption and expropriation, Valencian municipalities can opt for compulsory land readjustment, without having to become directly involved. Landowners can choose for voluntary expropriation or can participate in the development and share the value increase that accrues from re-zoning. If they participate, they are obliged by law to deliver the land needed for public infrastructure and pay to a third party (the urbanising agent) a proportional share of the costs of public infrastructure. If they choose expropriation, the urbanising agent pays the compensation and acquires the land. The municipality selects in a public tender this urbanising agent, who may be a public company but most of the times is a commercial developer. After providing the

infrastructure, the urbanising agent delivers the serviced building parcels to the landowners and transfers the public infrastructure free of charge to the municipality.

In Valencia the public or private developers who provide the infrastructure (the urbanising agents) do not necessarily need to own or control the land, while in England and the Netherlands this is necessary (Muñoz & Korthals Altes, 2007).

### Option to wait popular in England and the Netherlands

On the one hand, in Valencia there is no mutual dependence and landowners do not have the option to wait. Although compulsory readjustment is not common, it does play an important role in dissuading landowners from taking actions that may delay development (see Figures 11.4, 11.5 and Box 11.9).

FIGURE 11.5 REGENERATION OF GUILLEM DE ANGESOLA, VALENCIA, SPAIN



Sources: Maps Live; 2005 Detailed Land-use Plan.

### BOX 11.9 REGENERATION OF GUILLEM DE ANGESOLA, VALENCIA, SPAIN - CASE VARIABLES

#### *Second variable: Property rights*

Neither the initiating developer (Proara, the one who first submitted a regeneration plan), nor the other three developers who in the public tender submitted alternative plans, were linked to the landownership in the area. The possibility of selecting a developer without owning land has been a crucial factor. As there were hundreds of owners (many of them residents or small landlords), it seems unlikely that all these actors would have agreed on a voluntary land readjustment. Therefore, the option to 'by-pass' the landowners has been a crucial factor in redeveloping the site.

Finally, Proara was selected as the urbanising agent and then progressively bought land. The landowners had to accept the full contributions package, and the urbanizing agent accepted additional contributions: an important part of the infrastructure costs that according to planning law should be paid by the landowners, and additional compensation to the owners of the old deteriorated houses.

**Realised public-value capturing** The developer pays the entire on-site public infrastructure (mainly the new avenue cutting the site). In total, 74% of the land will be used for public infrastructure, of which the landowners provide 2/3 for free. The Municipality provides the other 1/3 (the actual roads). Most of the costs and land are meant for the construction of a new avenue cutting the site. This avenue serves not only this small site, but also a much wider area. In addition, the developer will build between 30% and 50% of the dwellings as social houses to sell.

On the other hand, in England and the Netherlands landowners have the option to oppose the contributions package or other municipal requirements and wait. In the English and Dutch cases, the option to wait was not an exception but rather used quite frequently (see Figures 11.2 and 11.3). This is not an exception in urban regeneration in these countries.

There are several different motivations for landowners and developers choosing the option to wait. First, there is the expectation that longer negotiations lead to higher profits, due to reduced contributions or regular land prices increasing over time. This expectation makes the option to wait the best rational choice from an economic point of view. Another motivation to wait is when municipal requirements are perceived as endangering the financial feasibility of the operation. As we just saw, it is not an exception at all that Dutch and English developers threaten to withdraw the application if the municipality does not lower the requirements. It is however difficult to assess the importance of this third variable (financial leeway of the plan) because of the lack of reliable sources. In the Dutch cases, following estimates based on information given by the developers, the financial leeway appears to be very narrow. However, following my own estimates, there was room for higher contributions (see Table 11.5: posting 8 minus postings 1-7).

To sum up, in the Dutch cases it is not clear if the financial margins were so narrow as to justify such opposition to the municipal requirements. Did developers use the option to wait because it was necessary or did they abuse this option in order to increase their profit margins? In the English cases, following my own estimates, the financial margins were bigger and allowed for greater contributions.

### Consequences for public-value capturing

In Valencia, landowners and developers do not have the option to wait, and therefore they cannot refuse the ambitious requirements of municipalities. The end result has been a great improvement of public infrastructure. In England and the Netherlands the option to wait has a negative effect; municipalities often do not demand high contributions or are often forced to lower the contributions package and the quality requirements.

Otherwise they face the risk of not reaching an agreement with the landowners/developers, thus delaying the development of the area (see Figures 11.2 - 11.5).

### Higher development costs in England and the Netherlands

This research provided remarkable and unexpected findings by uncovering large differences in the costs of infrastructure provision and plan preparation in the three studied countries. Development costs consist of:

1. Land prices;
2. The cost of constructing public infrastructure;
3. The costs of preparing plans, studies, meetings, tendering the works, etc.;
4. Soil decontamination costs;
5. Compensation costs (compensation to existing owners and inhabitants that must move and/or lose properties);
6. Contributions to public infrastructure;
7. Real estate development costs (the costs of developing and constructing the buildings).

The Dutch cases have the highest infrastructure provision and plan preparation costs (see Table 11.5): in Kruidenbuurt and Kop van Oost respectively €438 and €368 per m<sup>2</sup> of new public space<sup>2</sup>, in Stationskwartier the cost was

2 'New public space' is the surface that becomes redeveloped and will be used for public uses. Most of infrastructure provision costs relate to the construction of public infrastructure above or under this surface.

much higher, €1,212/m<sup>2</sup>, partially explained by the fact that this figure includes the price of land, soil decontamination, compensation costs and probably contains a hidden profit for the municipality. In the English cases the infrastructure provision and plan preparation costs are €153, €269 and €332 per m<sup>2</sup>. In the Valencian cases they are €94, €693, €103 and €94 per m<sup>2</sup>; except for the second case these figures can be generalised for the entire Valencian region (Fernández & Fernández, 2002: 68-74; Gascó, 2006: 72-76).

Two Dutch experts confirmed the generalisability of the figures for the Netherlands, with nuances, by analysing three recent urban regeneration cases (see projects 1, 2 and 3 in Table 11.5). Infrastructure provision and plan preparation costs were together €352 per m<sup>2</sup> new public space in Project 1 and € 265 in Project 2. Such figures are not at all exceptional in urban regeneration in the Netherlands. Project 3 (€118 per m<sup>2</sup> new public space) suggests that there are exceptions to the general conclusion that these costs are much higher in the Netherlands than in Valencia (Stauttner and Van Bladel, interviews 2008). A possible explanation for the high cost of infrastructure provision and plan preparation costs in England and the Netherlands is that the option to wait has an inflationary effect on these costs. Delay results in additional studies, meetings, etc., increasing the plan preparation costs. In the Dutch Projects 1 and 2, plan preparation costs are €102 and €56 per m<sup>2</sup> of new public space respectively, while in the Valencian cases they are about €18. Unfortunately, it was not possible to specify these costs for the other Dutch and English cases. Delay and the corresponding uncertainties increase the risks, which translate into higher infrastructure provision costs, e.g. allocating higher reserve lines for unexpected expenses, and generating higher financial costs (loans for high risk projects are expensive, and a longer loan period involves higher costs).

In addition, the option to wait can also have an inflationary effect on land prices; market parties would be more interested in acquiring land to acquire a strong negotiating position. The findings in the Dutch cases seem to support this argument: land was often sold for higher than the market price of the former use. For example in Kop van Oost the estimated market value of the previous use (industrial land) was about €3.6m, but in 2001 it was sold for around €12m, so when it was sold again in 2002 the price must have been even higher. Higher land prices are negative for public-value capturing because they diminish the financial leeway for the developers to contribute.

## 11.6 CONCLUSIONS

There are large differences in public-value capturing in urban regeneration between England, the Spanish region of Valencia and the Netherlands. Public bodies in England and especially in Valencia managed: 1) to make developers provide the public infrastructure (public roads and space, sewerage, public facilities and buildings, affordable and social housing), either by paying for it or constructing it; and also 2) to capture part of the value increase that accrues after re-zoning land.

In the Netherlands public bodies must subsidise a large part of the public infrastructure. Since Dutch public bodies have been facing severe budgetary cuts in the last two decades and since they cannot rely on private contributions, the quality and quantity of public infrastructure in urban development in the Netherlands has deteriorated. The experience in England and Spain might provide interesting solutions for pursuing larger public-value capturing and public infrastructure improvements.

Two approaches can help to improve public-value capturing. In the first place, the certainty or lack of certainty about future contributions seems to have a relevant effect on land prices



TABLE 11.5 COMPARISON OF DEVELOPMENT COSTS AND RETURNS IN THE VALENCIAN, ENGLISH AND DUTCH CASES - PART I

|   | VALENCIAN CASES              |                              |                                 |                                  | ENGLISH CASES                 |  |  |
|---|------------------------------|------------------------------|---------------------------------|----------------------------------|-------------------------------|--|--|
|   | Guillem                      | Periodista                   | Camino                          | Benalúa                          | Megabowl                      | Temple                                     | Harbourside                                |
| 1. Price of land paid                                     |                              | Not available                |                                 |                                  |                               | Not available                              | Not available                              |
| 2. Infrass prov costs (€/m <sup>2</sup> new public space) | €0.66m (€77/m <sup>2</sup> ) | €1.1m (€418/m <sup>2</sup> ) | €3.3m (€85/m <sup>2</sup> )     | €5.5m (€75/m <sup>2</sup> )      | €1.3m (€153/m <sup>2</sup> )  | Estimation: €8.2m (€269/m <sup>2</sup> )   | €13.1m (€332/m <sup>2</sup> )              |
| 3. Plan prep costs (€/m <sup>2</sup> new public space)    | €0.15 (€17/m <sup>2</sup> )  | €0.7 (€279/m <sup>2</sup> )  | €0.7 (€18/m <sup>2</sup> )      | Ca. €1.1m (€19/m <sup>2</sup> )  |                               | €5m  |  |
| 4. Soil decontamination costs                             | -                            | -                            | Evt costs are included in 2)    | Evt costs are included in 2)     |                               | No/low                                     |  |
| 5. Compensation costs                                     | €1.9m                        | €2.2m                        | €7.8m                           | €1.9m                            |                               | No/low                                     | No/low                                     |
| 6. Contributions  | -                            | €1.6m                        | €14.2m                          | 2.683 m <sup>2</sup> floor space | €1.7m                         | About €6m                                  | €33m                                       |
| 7. Real estate dev costs (€/m <sup>2</sup> floor space)   | No data                      | No data                      | €86.5m (€1,150/m <sup>2</sup> ) | No data                          | €13.2m (€985/m <sup>2</sup> ) | Estimation: €114m (€1,000/m <sup>2</sup> ) | Estimation: €123m (€1,000/m <sup>2</sup> ) |
| 8. Total returns  | No data                      | No data                      | €432m                           | No data                          | €37.1m                        | €409m                                      | €404m                                      |



TABLE 11.5 COMPARISON OF DEVELOPMENT COSTS AND RETURNS IN THE VALENCIAN, ENGLISH AND DUTCH CASES - PART II

|   | DUTCH CASES                                       |                                     |  | DUTCH CASES (SECOND OPINION)  |                              |                              |
|---|---|-------------------------------------|--|-------------------------------|------------------------------|------------------------------|
|   | Kruidenbuurt                                      | KopvOost                            | Stationskwartier                       | Project 11                    | Project 22                   | Project 33                   |
| 1. Price of land paid                                       | €1.4m + 'boekwaarde' <sup>4</sup>                 | at least €12m                       |  | € 14.6m                       | €0.9m                        | €31.3m                       |
| 2. Infrast. prov. costs (€/m <sup>2</sup> new public space) |   |                                     |  | € 9.8m (€250/m <sup>2</sup> ) | €6.2m (€209/m <sup>2</sup> ) | €12.2m (€94/m <sup>2</sup> ) |
| 3. Plan prep. costs (€/m <sup>2</sup> new public space)     | €24.1m (€438/m <sup>2</sup> )                     | €7m (€368/m <sup>2</sup> )          | €80m (€1,212/m <sup>2</sup> )          | €4m (€102/m <sup>2</sup> )    | € 1.7 (€56/m <sup>2</sup> )  | €3.1m (€24/m <sup>2</sup> )  |
| 4. Soil decontamination costs                               | -   | €0.5m                               |  | -                             | -                            | -                            |
| 5. Compensation costs                                       | €5.4m   | €0.16m                              |  | -                             | €2.6m                        | €2.4m                        |
| 6. Contributions  | €0.5m   |                                     | About €15m                             | -                             | -                            | €1m?                         |
| 7. Real estate dev. costs (€/m <sup>2</sup> floor space)    | Estimation: €106 m (about €1,200/m <sup>2</sup> ) | €90m (about €1,600/m <sup>2</sup> ) | € 320 m (about €1,300/m <sup>2</sup> ) | No data                       | No data                      | No data                      |
| 8. Total returns  | €150m   | €112 m, €139m                       | €480-520m                              | No data                       | No data                      | No data                      |

and on the negotiations between local public bodies and private parties. Local planning bodies can modify the behaviour and profit expectations of landowners and real estate developers by using their policy-making powers to anticipate the contributions that market parties should make. The important step is for the public bodies to make explicitly clear in a public document what they expect, with proper argumentation. The experience in England and Spain shows the importance of central government policy that stimulates local public bodies to introduce these measures, for example, issuing model documents and giving financial stimuli to those local bodies that produce value capturing policy.

In the second place, this chapter presented evidence that a specific form of shaping property rights on land can improve public-

value capturing, i.e. the Valencian land readjustment regulation that successfully separated infrastructure provision from property rights in land. In addition, the regulation can also have a deflationary effect on the costs for providing infrastructure and preparing plans. This supports the idea that property law in relation to the goal of producing urban space and housing is not only a matter of rights; it also involves obligations. The adoption of a combined approach to property rights and duties, through a land readjustment regulation, may help regulate the initiatives taken by landowners and commercial developers in such a way that they fulfill a greater role in the creation of public infrastructure. It can also help to overcome problems of stagnation in constructing new housing, a serious problem that is not limited to the Netherlands or the UK but also affects numerous other countries, e.g. Sweden.

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